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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,768	03/23/2006	Yury Gogotsi	DXYC-0039 / 03-0501D	1617
23377 7590 06/16/2010 WOODCOCK WASHBURN LLP CIRA CENTRE, 12TH FLOOR 2929 ARCH STREET PHILADELPHIA, PA 19104-2891				
EXAMINER HENDRICKSON, STUART L				
ART UNIT		PAPER NUMBER		
1793				
MAIL DATE		DELIVERY MODE		
06/16/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/561,768

**Applicant(s)**

GOGOTSI ET AL.

**Examiner**

Stuart Hendrickson

**Art Unit**

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 3/30/10.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 4-6, 8-15 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-6, 8-15, 17-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action. The RCE is accepted.

Claims 1, 4-6, 8, 9, 11-15, 17, 19, 20 are rejected under 35 U.S.C. 103(a) as obvious over Leis article.

Leis teaches on pg. 2043-2044 reacting AIC and halogen gas at several temperatures. The teaching of Ti, Si carbide is noted. No difference is seen in the product porosity. As to claim 20, using the intervals of 100 degrees is obvious to better characterize the materials. The claimed verbiage is not taught, however no differences are seen since the claims permit freely choosing small differences in temperature to get essentially the same result. In fact, the claims (other than 20) read upon an attempt to duplicate an experiment but having a small unavoidable minor temperature fluctuation between runs.

Claims 1, 2, 4-6, 8-15, 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leis taken with El-Raghy.

Leis does not teach the compound of claim 2. El-Raghy teaches it as a composite of TiC and SiC. Using it as a source is an obvious expedient to make the desired carbon, noting that Leis teaches carbides as useful materials in the introduction.

Claims 1, 4-6, 8-15, 17, 19, 20 are rejected under 35 U.S.C. 103(a) as obvious over Boehm article.

Page 149 teaches narrow-pore distribution carbon made from reacting TaC with at 500C. The results of several different temperatures are plotted and correlated. As to claim 20, using the intervals of 100 degrees is obvious to better characterize the materials. The claimed verbiage is not taught, however no differences are seen since the claims permit freely choosing small differences in temperature to get essentially the same result. In fact, the claims (other than 20) read upon an attempt to duplicate an experiment but having a small unavoidable minor temperature fluctuation between runs.

Claims 1, 4, 6, 8-14, 17, 19, 20 are rejected under 35 U.S.C. 103(a) as obvious over Mohun 3066099.

The reference teaches, especially in col. 6, 10, 35 and 36 heating SiC with chlorine at various temperatures to make a microporous material. No difference is seen in the pore distribution. The claimed verbiage is not taught, however no differences are seen since the claims permit freely choosing small differences in temperature to get essentially the same result. In fact, the claims (other than 20) read upon an attempt to duplicate an experiment but having a small unavoidable minor temperature fluctuation between runs.

Applicant's arguments filed 3/3/10 have been fully considered but are not persuasive.

It appears that from the data presented in the references, a temperature spread of 200 would overcome Boehm and 400 degrees would overcome Leis, since the results provide carbons with materially different properties. Only claim 20 requires even a modest temperature change, however. Also, the alleged 'narrow' pore distribution is worded so as to encompass a rather broad distribution. To illustrate, note 4261709, especially col. 3 and the figures. One would normally consider the peaks narrow and broad respectively, however the narrow peak is centered around 5A, so its width at half height being a few A actually puts it in jeopardy as to not being 'narrow' according to the claims. The broader peak actually comes out as more 'narrow' according to the claims since its maximum point is at 15A, which allows for much more latitude. This is not a 112 issue per se, but applicants should consider this when they draft their response to this action. Previous remarks are incorporated. The claims are not specific enough to be patentable; it appears that by trying to make a generic claim, applicants have encompassed the existing art.

Any inquiry concerning this communication should be directed to examiner Hendrickson at telephone number (571) 272-1351.

/Stuart Hendrickson/  
Primary examiner Art Unit 1793